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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/582,624 | 06/12/2006 | Godo Sakamoto | 10404/21 | 2789 |
| 23838 7590 07/07/2009 KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005 | | | | |
| EXAMINER | | | | |
| GRAY, JILL M | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1794 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/582,624

Applicant(s)

SAKAMOTO ET AL.

Examiner

Jill Gray

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Pursuant to the entry of the amendments of February 10, 2009 and March 17, 2009, the status of the claims is as follows: Claims 1-9 have been cancelled. Claims 10-18 are under prosecution. No claims have been amended.

Priority

2. Applicants' submission of a Certified English language translation of the priority document of Japanese Patent Application No. 2004-092305 has been noted. However, there is no clear support for the subject matter of present claims 11 and 12 in the Certified English language translation. Accordingly, applicants' claim for priority for the subject matter of present claims 11 and 12 based upon an effective filing date of Japanese Application 2004-092305 filed March 26, 2004 is withdrawn. Tam et al., US 6,969,553 is prior art against these claims.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tam et al., US 6,969,553, for reasons of record.

Tam discloses high strength gel-spun polyethylene multifilament yarns as does applicants. In addition, Tam discloses a stress Raman shift factor that appears to be within the range contemplated by applicants. Note Figure 1 of Tam. Accordingly, the examiner has reason to believe that properties such as the ratio of crystal sizes derived from the (200) and (020) diffractions of an orthorhombic crystal (claim 11) and the

crystal size of a monoclinic crystal (claim 12) are the same as or substantially similar to those contemplated by applicants, so as to render obvious present claims 11 and 12.

There is no clear factual evidence on this record to the contrary.

Therefore, the teachings of Tam would have rendered obvious the invention as claimed in present claims 11 and 12.

5. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 01/73173 (the publication) for reasons of record.

The publication discloses gel-spun polyethylene multifilament yarns. The publication discloses that the multifilament yarns have a tenacity of at least about 35 g/d. This open ended range would render obvious the present claimed "not lower than 20cN/dTex" of claim 13. The multifilaments have a denier of about 0.7 to 2 dpf, which meets the requirement of claim 17 of a fineness of "not higher than 10 dTex". In addition, the publication appears to disclose in the Figures diffractions of an orthorhombic crystal that would appear to render obvious the present claims 11-12. Accordingly, it is the examiner's position that the polyethylene multifilament yarn of the prior art appears to be the same as or substantially similar to that contemplated by applicants in present claims 10 and 18. Hence properties such as the knot strength, CV variation in the strengths of monofilaments and elongation to break would be the same or substantially similar as well. There is no clear factual evidence on this record to the contrary.

Response to Arguments

6. Applicant's arguments filed March 17, 2009 have been fully considered but they are not persuasive.

Applicants argue that they believe that the high rate of a high strain orthorhombic crystalline component in the polyethylene multi-filament yarn of WO 01/73173 does not necessarily lead to a small stress distribution.

In this regard, applicants have provided no clear factual evidence on this record to substantiate this allegation. The prior art teaches gel-spun polyethylene multifilament yarns, as does applicants. It is not clear on this record that the same type of multifilament would not possess the same or similar properties.

Applicants argue the polyethylene multifilament yarn of the prior art is obtained by a process that is different from the process of the present invention.

In this regard, applicants' claims are drawn to a product, wherein patentability is based upon the product itself. Accordingly, these arguments are not germane in the absence of clear factual evidence of record of unexpected or superior properties of the resultant polyethylene multifilament yarn, said properties being directly related to the specific process of making.

No claims are allowed.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jill Gray/

Application/Control Number: 10/582,624

Page 6

Art Unit: 1794

Primary Examiner
Art Unit 1794

jmg